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## **VIII. CURRENT AND PROPOSED AVERAGE SCHEDULE SETTLEMENT FORMULAS**

A. COMMON LINE FORMULAS

COMMON LINE ACCESS LINE FORMULA

Current Formula:

$$\text{Settlement} = \text{Common Line Access Lines} \times \text{Settlement Per Common Line Access Line}$$

If Lines Per Exchange less than 439 then,

$$\text{Settlement per Line} = \$14.171676 - (\$0.005136 \times \text{Lines Per Exchange})$$

If Lines Per Exchange greater than or equal to 439 but less than 10,000 then,

$$\text{Settlement per Line} = \$8.228408 + (\$1,619.185607 / \text{Lines Per Exchange})$$

If Lines Per Exchange greater than or equal to 10,000 but less than 15,000 then,

$$\text{Settlement per Line} = \$11.834482 - (\$0.000345 \times \text{Lines Per Exchange})$$

If Lines Per Exchange greater than or equal to 15,000 then,

$$\text{Settlement per Line} = 0.7999 \times \{ \$8.228408 + (\$1,619.185607 / \text{Lines Per Exchange}) \}$$

Proposed Formula:

$$\text{Settlement} = \text{Common Line Access Lines} \times \text{Settlement Per Common Line Access Line}$$

If Lines Per Exchange less than 513 then,

$$\text{Settlement per Line} = \$15.853821 - (\$0.009580 \times \text{Lines Per Exchange})$$

If Lines Per Exchange greater than ~~or~~ equal to 513 but less than 10,000 then,

$$\text{Settlement per Line} = \$8.652836 + (\$1,172.946518 / \text{Lines Per Exchange})$$

If Lines Per Exchange greater than or equal to 10,000 but less than 15,000 then,

$$\text{Settlement per Line} = \$11.359373 - (\$0.000259 \times \text{Lines Per Exchange})$$

If Lines Per Exchange greater than or equal to 15,000 then,

$$\text{Settlement per Line} = 0.8562 \times (\$8.652836 + (\$1,172.946518 / \text{Lines Per Exchange}))$$

### **COMMON LINE RATE OF RETURN FORMULA:**

Monthly Common Line settlements are adjusted to reflect the Rate of Return (ROR) achieved by the total NECA Common Line pool.

#### **Current Formula:**

$$\text{Common Line Factor} = 0.718385 + (2.503244 \times \text{ROR})$$

#### **Proposed Formula:**

$$\text{Common Line Factor} = 0.722393 + (2.467618 \times \text{ROR})$$

### **UNIVERSAL SERVICE SUPPORT CONTRIBUTION FORMULA:**

#### **Current Formula:**

Average Schedule Companies will receive a common line settlement reimbursement equal to the Average Schedule Company's contribution to the Federal Universal Service program assigned to the interstate common line access element according to Commission rules.

#### **Proposed Formula:**

Average Schedule Companies will receive a common line settlement reimbursement **equal** to the Average Schedule Company's contribution to the Federal Universal Service program assigned to the interstate common line access element according to Commission rules.

### **COMMON LINE LINE PORT FORMULA**

#### **Current Formula:**

$$\text{Common Line Line Port Formula} = 0.184771 \times \text{Central Office formula}$$

#### **Proposed Formula:**

$$\text{Common Line Line Port Formula} = 0.178995 \times \text{Central Office formula}$$

## COMMON LINE TRANSPORT FORMULAS:

### Current Formula:

$$\begin{aligned}\text{Common Line Transport Formula} = & 0.281651 \times \{ \text{Line Haul Distance Sensitive Formula} \\ & + \text{Line Haul Non-Distance Sensitive Formula} \\ & + \text{Intertoll Switching Formula} \}\end{aligned}$$

### Proposed Formula:

$$\begin{aligned}\text{Common Line Transport Formula} = & 0.337068 \times \{ \text{Line Haul Distance Sensitive Formula} \\ & + \text{Line Haul Non-Distance Sensitive Formula} \\ & + \text{Intertoll Switching Formula} \}\end{aligned}$$

## CENTRAL OFFICE FORMULA

### Current Formula:

$$\text{Settlement} = (\text{Basic Settlement} \times \text{Access Line Factor}) + \$2,488.64$$

For Study Areas with Minutes Per Line Less Than or Equal to 350:

$$\text{Basic Settlement} = (\$0.022380 \times \text{Access Minutes}) + (\$609.49 \times \text{Exchanges})$$

For Study Areas with Minutes Per Line Greater Than 350 but **Less** Than or Equal to 900:

$$\begin{aligned}\text{Basic Settlement} = & (\$0.022380 \times 350 \times \text{Access Lines}) \\ & + \{ \$0.009994 \times [\text{Access Minutes} - (350 \times \text{Access Lines})] \} \\ & \times \text{High Volume Access Line Multiplier} + (\$609.49 \times \text{Exchanges})\end{aligned}$$

For Study Areas with Minutes Per Line Greater Than 900:

$$\begin{aligned}\text{Basic Settlement} = & (\$0.022380 \times 350 \times \text{Access Lines}) \\ & + (\$0.009994 \times (900 - 350) \times \text{Access Lines}) \\ & + \$0.005165 \times [\text{Access Minutes} - (900 \times \text{Access Lines})] \times \text{High Volume Access Line Multiplier} \\ & + (\$609.49 \times \text{Exchanges})\end{aligned}$$

Access Line Factor:

For study areas with common line access lines less than 10,000:

$$\text{Access Line Factor} = 2.031049 + (-0.000103105 \times \text{Common Line Access Lines})$$

For study areas with common line access lines greater than or equal to 10,000:

$$\text{Access Line Factor} = 1.0$$

$$\text{High Volume Access Line Multiplier} = (550 / \text{Common Line Access Lines})$$

### **Proposed Formula:**

$$\text{Settlement} = (\text{Basic Settlement} \times \text{Access Line Factor}) + \$2,909.42$$

For Study Areas with Minutes Per Line Less Than or Equal to 350:

$$\text{Basic Settlement} = (\$0.025078 \times \text{Access Minutes}) + (\$884.01 \times \text{Exchanges})$$

For Study Areas with Minutes Per Line Greater Than 350 but Less Than or Equal to 850:

$$\begin{aligned} \text{Basic Settlement} &= (\$0.025078 \times 350 \times \text{Access Lines}) \\ &+ (\$0.012800 \times [\text{Access Minutes} - (350 \times \text{Access Lines})]) \\ &\times \text{High Volume Access Line Multiplier} + (\$884.01 \times \text{Exchanges}) \end{aligned}$$

For Study Areas with Minutes Per Line Greater Than 850:

$$\begin{aligned} \text{Basic Settlement} &= (\$0.025078 \times 350 \times \text{Access Lines}) \\ &+ (\$0.012800 \times (850 - 350) \times \text{Access Lines}) \\ &+ \$0.008040 \times [\text{Access Minutes} - (850 \times \text{Access Lines})] \times \text{High Volume Access Line Multiplier} \\ &+ (\$884.01 \times \text{Exchanges}) \end{aligned}$$

Access Line Factor:

For study areas with common line access lines less than 10,000:

$$\text{Access Line Factor} = 1.805977 - 0.0000805977 \times \text{Common Line Access Lines}$$

For study areas with common line access lines greater than or equal to 10,000:

$$\text{Access Line Factor} = 1.0$$

$$\text{High Volume Access Line Multiplier} = (475 / \text{Common Line Access Lines})$$

### **TRAFFIC SENSITIVE CENTRAL OFFICE FORMULA**

#### **Current Formula:**

$$\text{Traffic Sensitive Central Office} = (1 - 0.184771) \times \text{Central Office Formula}$$

#### **Proposed Formula:**

$$\text{Traffic Sensitive Central Office} = (1 - 0.178995) \times \text{Central Office Formula}$$

## INTERTOLL SWITCHING FORMULA

### Current Formula:

$$\text{Settlement Per Intertoll Trunk} = \$18.76$$

### Proposed Formula:

$$\text{Settlement Per Intertoll Trunk} = \$18.77$$

## LINE HAUL DISTANCE SENSITIVE FORMULA

### Current Formula:

For study areas with circuit miles greater than zero and circuit miles per circuit less than or equal to 100:

$$\text{Settlement} = (\$0.525591 \times \text{Circuit Miles}) + (\$0.003071 \times \text{Access Minutes})$$

For study areas with circuit miles per circuit greater than 100:

$$\begin{aligned} \text{Settlement} = & (\$0.525591 \times 100 \times \text{Circuits}) \\ & + \$0.054383 \times (\text{Circuit Miles} - (100 \times \text{Circuits})) \\ & + (\$0.003071 \times \text{Access Minutes}) \end{aligned}$$

### Proposed Formula:

For study areas with circuit miles greater than zero and circuit miles per circuit less than or equal to 100:

$$\text{Settlement} = (\$0.511164 \times \text{Circuit Miles}) + (\$0.002850 \times \text{Access Minutes})$$

For study areas with circuit miles per circuit greater than 100:

$$\begin{aligned} \text{Settlement} = & (\$0.511164 \times 100 \times \text{Circuits}) \\ & + \$0.044395 \times (\text{Circuit Miles} - (100 \times \text{Circuits})) \\ & + (\$0.002850 \times \text{Access Minutes}) \end{aligned}$$

## **LINE HAUL NON-DISTANCE SENSITIVE FORMULA:**

### **Current Formula:**

For study areas with interstate circuit terminations per exchange less than 122:

$$\text{Settlement Per Interstate Circuit Termination} = \\ \$31.95 - \$0.128745 \times \text{Terminations Per Exchange}$$

For study areas with interstate circuit terminations per exchange greater than or equal to 122:

$$\text{Settlement Per Interstate Circuit Termination} = \$16.24$$

### **Proposed Formula:**

For study areas with interstate circuit terminations per exchange less than 122:

$$\text{Settlement Per Interstate Circuit Termination} = \\ \$32.98 - \$0.111640 \times \text{Terminations Per Exchange}$$

For study areas with interstate circuit terminations per exchange greater than **or** equal to 122:

$$\text{Settlement Per Interstate Circuit Termination} = \$19.36$$

## **TRAFFIC SENSITIVE TRANSPORT FORMULAS:**

### **Current Formula:**

$$\text{Traffic Sensitive Transport} = (1 - 0.281651) \times \{ \text{Line Haul Distance Sensitive Formula} \\ + \text{Line Haul Non-Distance Sensitive Formula} \\ + \text{Intertoll Switching Formula} \}$$

### **Proposed Formula:**

$$\text{Traffic Sensitive Transport} = (1 - 0.337068) \times \{ \text{Line Haul Distance Sensitive Formula} \\ + \text{Line Haul Non-Distance Sensitive Formula} \\ + \text{Intertoll Switching Formula} \}$$



### SPECIAL ACCESS FORMULA:

#### Current Formula:

For study areas with Special Access Revenues per Exchange less than 2,250:

$$\text{Settlement} = [\text{Special Access Revenues} \times \$0.836250 \times (2.0 - 0.000444 \times \text{Special Access Revenues per Exchange})] \times \text{Tariff Rate Index}$$

For study areas with Special Access Revenues per Exchange greater than or equal to 2,250:

$$\text{Settlement} = \text{Special Access Revenues} \times \$0.836250 \times \text{Tariff Rate Index}$$

$$\text{Tariff Rate Index} = 1 / (1 + \text{Tariff Special Access Relative Rate Change Since 12/01})$$

$$= 1.078 \text{ beginning July 2002}$$

#### Proposed Formula:

For study areas with Special Access Revenues per Exchange less than 2,435:

$$\text{Settlement} = [\text{Special Access Revenues} \times \$0.843811 \times (2.0 - 0.000411 \times \text{Special Access Revenues per Exchange})] \times \text{Tariff Rate Index}$$

For study areas with Special Access Revenues per Exchange greater than ~~or~~ equal to 2,435:

$$\text{Settlement} = \text{Special Access Revenues} \times \$0.843811 \times \text{Tariff Rate Index}$$

$$\text{Tariff Rate Index} = 1 / (1 + \text{Tariff Special Access Relative Rate Change Since 12/02})$$

$$= 1.0, \text{ based on July 2002 tariff rates}$$

### TRAFFIC SENSITIVE RATE OF RETURN FORMULA:

Monthly Traffic Sensitive settlements are adjusted to reflect the Rate of Return (ROR) achieved by the total NECA Traffic Sensitive pool.

#### Current Formula:

$$\text{Traffic Sensitive Factor} = 0.747414 + (2.245209 \times \text{ROR})$$

#### Proposed Formula:

$$\text{Traffic Sensitive Factor} = 0.752116 + (2.203413 \times \text{ROR})$$

## **EOUAL ACCESS IMPLEMENTATION FORMULA:**

### **Current Formula:**

The interstate portion of initial incremental equal access expenses paid in the month in which they are incurred and  $0.0247 \times$  (the interstate portion of initial incremental equal access investment) per month for **96** months.

### **Proposed Formula:**

The interstate portion of initial incremental equal access expenses paid in the month in which they are incurred and  $0.0247 \times$  (the interstate portion of initial incremental equal access investment) per month for 96 months.

## **SIGNALING SYSTEM 7 FORMULAS:**

### **Current Formula:**

Settlement = \$1,332	For each end office with SP or SSP equipment in service with full connectivity to the nationwide Signaling network.
Settlement = \$720	For each end office with SP or SSP equipment in service not yet having full connectivity to the nationwide Signaling network.

### **Proposed Formula:**

Settlement = \$1,346	For each end office with <b>SP</b> or SSP equipment in service with full connectivity to the nationwide Signaling network.
Settlement = \$716	For each end office with SP or SSP equipment in service not yet having full connectivity to the nationwide signaling network.

## **NETWORK ADMINISTRATION FORMULA:**

### **Current Formula:**

The incremental interstate costs of inter-company charges for network administration, **as** approved by the Commission for recovery by cost companies.

### **Proposed Formula:**

The incremental interstate costs of inter-company charges for network administration, as approved by the Commission for recovery by cost companies.

## GLOSSARY

Term	Definition
Access Line	An end of period count of all working communication facilities extending from an end user's premises terminating in an end office (Class 5) that are or may be used for local exchange service. For multiparty service, the number of access lines equals the number of loops terminating on the mainframe of the central office. If two party lines are bridged in the field, they are counted together as an access line. The reported lines include public and semi-public pay telephone lines, access lines used for Customer Owned Coin Operated Telephone Sets (COCOTS), and employee concession lines. Excluded are company official lines and special access lines (i.e., FX service at either the closed or open end, WATS/800 Service lines at closed end, etc.). Inclusion of public pay telephone is effective April 1997. Prior to April 1997, public pay telephones are excluded from access line counts. For average schedule settlements reporting, beginning July 1, 2002, each BRI ISDN line counts as one access line and each PRI ISDN line counts as five access lines.
Access Line Factor	The component of the Traffic Sensitive Central Office Formula that compensates for the higher Local Switching Revenue Requirement per Minute, including DEM weighting, incurred by study areas with less than 10,000 access lines. It ensures that smaller study areas receive relatively higher settlements per minute and per exchange than larger companies. (See Section VII.E.2.a, b and c for formula.)
Access Minute	For average schedule companies, access minutes are the total of all premium and non-premium interstate traffic sensitive switched access minutes of use. Includes all Feature Group A, B, C, and D interstate access minutes of use that are switched in a Class 5 end office of an average schedule exchange carrier.
	For companies, who do not monthly traffic sensitive premium common line minutes derived from reported by average access minutes for (See S III.E.1.d for calculation.)
	A communications path that connects a Signaling System 7 (SS7) switching office or Consolidation Point (CP) to its home Signaling Transfer Point (STP). A-links are always installed in pairs from an SS7 switching office or CP, with one to each "mated" STP.
Access Market Survey	A bi-annual survey, conducted by NECA, that studies the deployment of fiber optics, digital switching, Signaling System 7 (SS7), Integrated Services Digital Network (ISDN), Digital Subscriber Line (DSL) and other services by small telephone companies that participate in the NECA Traffic Sensitive pool.
	Statistically derived formulas used in NECA's average schedule studies to determine the interstate portion of a statistical sample of average schedule accounts assigned to access elements, as mandated by Part 69 of the Commission's rules.
Average Effective Tax Rate	The weighted average effective Federal Income tax rate from 2000 Sample Cost studies.

## APPENDICES

## 2003 Modification of Average Schedules

### Glossary

Term	Definition
Carrier Access Billing System (CABS) Cost Model	The CABS model is developed by applying ordinary regression methods to the interstate CABS portion of service expenses reported in sample cost studies. Calculation for CABS Cost can be found in Section VII.E.1
Common Line TIC Shift Factor	The fraction of transport settlements paid from the common line pool pursuant to the MAG Order.
cost	A component of an exchange carrier's accounts, attributed to a particular service or jurisdiction.
Cost Company Settlement Statements (EC3050)	The reports created by NECA that display a cost company's current month's settlement computation using estimated current month data and the combined effects of prior period adjustments. In addition, these reports show distributions from the Universal Service Long Term Support and Local Switching Support Funds.
Cost Study Database	A database created by NECA that contains cost study account data separated to the interstate jurisdiction and allocated to access categories by NECA's Cost Study program for companies which settle with NECA based on individual cost.
Customer Database	A database, administered by NECA, that contains information related to NECA's revenue distribution agreements with individual companies (e.g. company name and address, contact persons, tax status indicator, number of exchanges, pool and tariff participation indicators, etc.).
Cutoff Point	A value used to distinguish an influential data point versus a non-influential data point
Data Projections	The amounts calculated to represent a level of an account or demand variable of a sample study area, in a period usually the test period later than the historical period, from which the supporting data was taken.
DFFITS	A statistic that measures the influence each observation has on the predicted value for that observation. It measures the change in the predicted value calculated for the <i>ith</i> observation before after deleting the <i>ith</i> observation.
Equivalent Circuit Miles	A composite of normal route and long route circuit miles used in the Line Haul Distance Sensitive regression model. Equivalent Circuit Miles is defined as normal route circuit miles added to the product of the Long Route Relative Cost Ratio and long route circuit miles.
Exchange	A unit generally smaller than a Local Access and Transport Area, established by the telephone company for the administration of communications services in a specified area which usually embraces a city, town, or village and its environs. It uses one or more central offices together with the associated facilities used in furnishing communications services within that area.
High Lines Per Exchange Multiplier	A factor used in the Common Line formula that accounts for the lower cost per line of the large lines per exchange study areas.  <i>High Lines Per Exchange Multiplier = .8562</i>

**2003 Modification of Average Schedules**  
**Glossary**

<b>Term</b>	<b>Definition</b>
Average Revenue Requirement Growth Ratio	The ratio of the sum of weighted 2000 unseparated revenue requirements to the sum of weighted 1999 unseparated revenue requirements using data from all average schedule study areas in the 2001 Sample.
Average Schedule Company Settlement Statements (AS3000)	The reports created by NECA that display an average schedule company's monthly net settlement computation, using estimates or adjustments provided by the company. Net settlement is the difference between gross settlement calculated using average schedule settlement formulas, and earned revenues, which include Access Charge revenues. The report also show distributions from Long Term Support (LTS) and Local Switching Support (LSS) funds.
Average Schedule USF Expense Adjustment	Amounts distributed to qualified average schedule companies pursuant to FCC rule Part 36.631 derived from the Universal Service Fund average schedule formula developed by NECA to estimate the loop costs of average schedule companies. Universal Service Administrative Company (USAC) transfers the Universal Service Support amounts by study area to NECA for distribution as part of the monthly settlement process.
Baseline Cost per Minute	<p>The average monthly central office revenue requirement per minute among average schedule study areas having more than 10,000 access lines. This is used in developing the Basic Cost per Minute Model.</p> $\text{Baseline Cost per Minute} = \frac{\sum_{i=1}^n (\text{Sample Weight}_i \times \text{Monthly Central Office Revenue Requirement}_i)}{\sum_{i=1}^n (\text{Sample Weight}_i \times \text{Access Minutes}_i)}$ <p><math>n</math> = The number of average schedule study areas in the sample having more than 10,000 access lines.</p>
Basic Cost per Minute	<p>The Basic Cost per Minute for each sample average schedule study area (<math>i</math>) was used in regression analysis to develop the Basic Cost per Minute Model.</p> <p>For sample average schedule study areas, Basic Cost per Minute was calculated as:</p> $\text{Basic Cost per Minute}_i = \frac{\text{Central Office Revenue Requirement per Access Minute}_i}{\text{Model Access Line Factor}_i}$
Basic Cost per Minute Model	4 component of the Traffic Sensitive Central Office formula developed using the Basic Cost per Minute data. The structure of this model can be found in Section VII.E.2.b.

## 2003 Modification of Average Schedules

### Glossary

Term	Definition
Local Switching Support Payment	The portion of the local switching settlement that is recovered through the new universal service fund effective January 1, 1998. The balance of the settlement is recovered through NECA's local switching access charges. Prior to January 1, 1998, the support amount was determined under the FCC's DEM weighing rules and recovered through access charges.
Long Route Circuit Miles	The difference between Interstate Circuit Miles and Normal Route Circuit Miles.
Long Route Relative Cost Ratio	A ratio of long route cost to normal route cost, where the numerator is determined using network company cost data, and the denominator is the Preliminary Normal Route Cost.
Measure of Size	A calculation used to determine sample probabilities, equal to the square root of total access revenues used to calculate the stratum standard deviation of each study area in the stratum.
Minutes per Line	<p>A ratio computed to develop and administer the Traffic Sensitive Central Office Formula.</p> $\text{Minutes per Line} = \frac{\text{Monthly Access Minutes}}{\text{Access Lines}}$
Month Sequence	A variable sequentially assigned to each month of a time series, and is used as an independent variable in modeling demand.
Normal Route Circuit Miles	The Interstate Circuit Miles, used to carry interstate switched access traffic, up to but not exceeding 100 miles per Interstate Circuit.
Neyman Allocation	A method of allocating the sample size to each stratum that determines the size of the sample in each in proportion to strata standard deviation.
Outlier Accommodation	The method of <b>diminishing</b> the variance of estimates by reducing the impact of influential data that are included in a regression model or ratio estimate.
Outlier Growth Test Ratio	The ratio measuring the impact of each study area on the Average Revenue Requirement Growth Ratio and used to determine which study areas are outliers to be excluded from all 2000 Sample Annual Growth Ratio calculations.
Outlier Identification	The procedure of identifying data points that are considered to be non-representative or that have undue influence on estimated model parameters.
Preliminary Normal Route Cost	The Line Haul Distance Sensitive cost per normal route circuit mile determined by regression based on companies without long routes only. This cost of \$0.518130, does not yet take into account the data from study areas with both normal routes and long routes. It is used to develop the Long Route Relative Cost Ratio.



## 2003 Modification of Average Schedules

### Glossary

Term	Definition
High Traffic Volume Period	A high traffic volume period is the most recent calendar year, either 1998 or 1999 for the 2000 data collection, or 1999 or 2000 for the 2001 data collection, when the minutes of use per line per month of a sample average schedule company exceed 350.
High Traffic Volume Threshold	A value of minutes per line which divides access minutes into groups for distinct settlement calculation methods. The High Volume Thresholds in the proposed Traffic Sensitive Central Office formula are at 350, and <b>850</b> minutes per line.
Interstate Circuit	One of the settlement variables in the distance sensitive line haul formula, obtained by a circuit count allocation method described in Section 7 of the Average Schedule Pool Administration Procedures.
Interstate Circuit Miles	The interstate allocation of the number of miles of circuits carrying interstate switched access traffic defined according to NECA's average schedule settlement procedures.
Interstate Switched Circuit Terminations	The interstate allocation of the number of terminations of circuits carrying interstate switched access traffic defined according to NECA's average schedule settlement procedures.
ISDN Line Adjustment Factor	The factor used to adjust test period access lines for the end user billing method for counting ISDN lines.
Line Haul Route	For Line Haul settlement purposes, a route is defined as the path that carries a switched line haul circuit from its origin switch to its destination switch or destination Point of Connection (POC). The origin and destination switch on a route must have switch ports assigned to circuits on the route. The destination POC must be the point of interconnection with an IC. An office that only provides a cross connect function for the circuit without hand-off to another carrier can not be the origin or destination of a route. Carriers may choose to separately identify routes to operator services facility locations for operator handled traffic for Line Haul settlements reporting. Examples of Line Haul route identification are: End Office to End Office, End Office to Tandem or POC, Remote to Host, Host to Tandem or POC, Intermediate Tandem to Access Tandem, Access Tandem to IXC Tandem or POC, Tandem to operator Services Location.
Line Port Shift Factor	The fraction of central office settlements paid from the common line pool pursuant to the FCC's MAG order of November 8, 2001.
Local Switching Support Fraction	The ratio of average schedule local switching support to the central office settlement (excluding CABS costs). Five fractions, depending on access line use and access minutes per line, are included in NECA's local switching support average schedule formula.

## 2003 Modification of Average Schedules Glossary

Term	Definition
Special Access Average Retention Ratio	An overall average special access retention ratio computed from average schedule sample data.
Special Access Basic Retention Ratio	A component of the special access average retention ratio not attributed to the Revenue Size Factor Model.
Special Access Revenues	The amount charged for all Traffic Sensitive Interstate Special Access rate elements.
Special Access Revenue Size Factor Model	A statistically derived model that determines a relationship between special access relative cost and company size.
Stratified Account Growth Ratio	The estimate of annual account growth calculated based on year over year changes in accounts from all average schedule study areas in each of three strata of the 2001 Sample.
Stratified Composite Growth Ratio	An account's annual growth ratio calculated by combining growth ratios from consecutive annual samples.
Stratified Multi-year Growth Ratio	A multi-year growth ratio extrapolated from Stratified Composite Growth Ratios and used to forecast base period account values of study areas in each of three strata of the 2000 and 2001 Samples to the test period.
Test Period	A future time period when the average schedule formulas are proposed to be effective. The test period for the 2003 Modification of Average Schedules is July 1, 2003 through June 30, 2004.
TIC Shift Factor	The fraction of transport settlements paid from the common line pool pursuant to the FCC's MAG order of November 8, 2001.
Total Conversation Minutes	A factor developed as part of a cost separations study and used to determine the portion of some facility costs to be assigned to the interstate jurisdiction.
Trend Change Indicator	A variable included in demand growth modeling to capture the impact of changes in historical data trends on <b>future</b> growth estimates.
Universal Service Contribution	The amount that telecommunications carriers, who provide interstate telecommunications services to others for a fee, contribute to the universal service support mechanisms based on their proportionate share of end-user telecommunication revenues as identified on the FCC's Form 499.
Universal Service contribution Reimbursement	The portion of the universal service contribution amount reimbursed to average schedule companies. This amount is equal to the actual paid <b>regulated</b> end user telephone operations universal service contributions which are assigned to the common line access element. Calculated in accordance with instructions for Line 12 in Section 5.0 of the Average Schedule Pool Administration Procedures.
Universal Service Loop Cost Formula	A formula filed by NECA with the FCC each year as part of the annual Modification to the Average Schedules, used to calculate an unseparated loop cost for each average schedule company. An average schedule company receives USF compensation if its formula value exceeds 115% of the nationwide average cost per loop. The formula is included in NECA's October USF Data Submission.

**2003 Modification of Average Schedules**  
**Glossary**

Term	Definition
"Precision" or "Precision of Sample Estimates"	A measure of how close an estimate derived from sample data is expected to come to the value that would have been computed by examining the entire population of study areas.
Probability Proportionate to Size (PPS)	The method for determining the probability that a particular study area is included in the multi-year sample. The method assigns a greater probability of selection to larger study areas. The PPS sample method is used because it is statistically efficient. It produces more precise estimates from a sample of specific size than do equal probability sampling methods.
Rate of Return Adjustment Factor	A monthly adjustment factor used to convert special access earned revenues from the achieved rate of return to the authorized rate of return.
Relative Interstate DEM	The ratio of a study area's unweighted Interstate Dial Equipment Minutes (DEM) to its unweighted Total DEM Minutes.
Revenue Requirement	The amount recoverable from interstate tariff charges, providing for expenses, taxes and a return on investment at the authorized rate of return.
Route Miles	The <b>sum</b> of lengths of the facilities on a line haul route owned or leased by <b>an</b> exchange carrier for the transport of interstate switched access traffic measured from switching point to switching point, or from switching point to point of connection.
Sample Design Criteria	A set of eight characteristics of study areas designated to <b>ensure</b> that the selected sample efficiently and accurately represents cost and average schedule study areas. They are used to stratify both populations into sub-groups from which the sample companies are selected.
Sample Weight	The reciprocal of the probability of including a study area in the sample in any given year. The sum of sample weights equals the total count of population <b>units</b> .
Separation Models	The statistically derived formulas used in NECA's average schedule studies to <b>determine</b> the interstate portion of accounts, as mandated by <b>Part 36</b> of the Commission's <b>rules</b> .
Settlement	The amount of pooled access revenue that each exchange carrier receives for providing interstate access service to interexchange carriers and other users.
Settlement Analysis Workpaper	A report prepared annually by NECA that compares a study area's <b>current</b> and proposed settlements, assuming constant demand.
Settlement Formula	One of a set of statistically derived formulas for use in calculating monthly settlements to average schedule companies, shown in Section VIII of <i>this</i> Filing.

2003 Modification of Average Schedules

Glossary

Term	Definition
Variance Weight	A multiplier, which is in inverse proportion to its contribution to total model variance, applied to influential points such that the impact of influential data on a regression model is minimized.

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## APPENDICES

